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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,855	08/23/2001	Jiro Tateyama	862.C2339	9121

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EXAMINER

LETT, THOMAS J

ART UNIT PAPER NUMBER

2626

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/934,855

Applicant(s)

TATEYAMA, JIRO

Examiner

Thomas J. Lett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9.23.05, 11.29.01</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see amendment, filed 23 September 2005, with respect to the rejections of claims 1-18 under 35 USC § 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yan et al combined with newly found prior art reference Vazquez et al (USPN 6,931,633 B1).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yan et al (USPN 6,003,065) in view of Vazquez et al (USPN 6,931,633 B1).

With respect to claim 1, Yan et al disclose an image processing system having plural devices (computer network 100, consisting of image devices), including a device capable of executing predetermined image processing, interconnected via a serial bus (Yan et al disclose that peripheral devices of the computer network 100 can interface (via interfaces 211 and 212) using a serial interface, col. 8, lines 16-25),

wherein a processing program for execution of said image processing is downloaded from said device capable of executing predetermined image processing to

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a device, which does not have a function of executing said image processing among said plural devices (Yan et al teach that to drive a peripheral device, the application need only download the necessary application or applet into the virtual machine instruction processor located on the peripheral device from a host computer, col. 10, lines 42-45)

Yan et al do not disclose wherein processing performance information indicating performance of executing said image processing based on the downloaded processing program is obtained from each of said plural devices, and

wherein an executing device to execute said image processing is determined from said plural devices based on said processing performance information.

Vazquez et al teach of evaluating the performance of image processing algorithms wherein the execution times for any script/algorithm is determined for the hardware/software events as applied to an image (col. 9, lines 4-34, col. 13, lines 56-67, and see Figs. 12-14).

Yan et al and Vazquez et al are analogous art because they are from the similar problem solving area of image processing performance. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the algorithm evaluation feature of Vazquez et al to the hardware system of Yan et al in order to obtain capability of determining the performance parameters of processing an image. The motivation for doing so would be to determine image processing speed.

With respect to claim 2, Yan et al do not disclose that the image processing system according to claim 1, wherein said processing performance information is obtained at each of plural processing steps constructing said image processing.

Vazquez et al teach of obtaining processing performance times at each step of image processing, see Fig. 14 and col. 14, lines 1-3.

Yan et al and Vazquez et al are analogous art because they are from the similar problem solving area of image processing performance. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the algorithm evaluation feature of Vazquez et al to the hardware system of Yan et al in order to obtain capability of determining the performance parameters of processing an image. The motivation for doing so would be to determine image processing speed.

With respect to claim 3, Yan et al do not disclose that the image processing system according to claim 2, wherein said processing performance information is obtained by measuring processing time upon execution of said image processing on predetermined sample image data.

Vazquez et al teach of obtaining processing performance times at each step of image processing of image data selected by a user, see Fig. 14 and col. 14, lines 1-3.

Yan et al and Vazquez et al are analogous art because they are from the similar problem solving area of image processing performance. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the algorithm evaluation feature of Vazquez et al to the hardware system of Yan et al in order to

obtain capability of determining the performance parameters of processing an image.

The motivation for doing so would be to determine image processing speed.

With respect to claim 4, Yan et al do not disclose that the image processing system according to claim 2, wherein said executing device is determined at each of plural processing steps constructing said image processing based on said processing performance information.

Vazquez et al teach of obtaining processing performance times at each step of image processing, see Fig. 14 and col. 14, lines 1-3.

Yan et al and Vazquez et al are analogous art because they are from the similar problem solving area of image processing performance. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the algorithm evaluation feature of Vazquez et al to the hardware system of Yan et al in order to obtain capability of determining the performance parameters of processing an image. The motivation for doing so would be to determine image processing speed.

With respect to claim 5, Yan et al disclose that executing device is determined so as to minimize the processing time of said image processing (system also includes a determination mechanism typically embedded in the application which queries the peripheral database based upon a predetermined criteria and selects which peripheral device should execute the application, col. 19, lines 1-9).

With respect to claim 6, Yan et al disclose an image processing system according to claim 1, wherein transfer performance information indicating a data transfer speed between said plural devices is further obtained (a user or application can

automatically locate a printer device based on print speed and print capacity, col. 17, lines 34-43), and wherein said executing device is determined based on said transfer performance information (Yan et al teach a method that automatically selects a peripheral device for performing the requested job based upon the predetermined selection criteria, col. 19, lines 1-9).

With respect to claim 7, Yan et al disclose said execution program is downloaded between devices having a common operating system (Yan et al teach of using operating system 230 as the JAVA OS operating system which can be executed on virtual machine instruction processor 214 and processes JAVA language instructions most efficiently in all of the plural devices, col. 10, lines 6-15).

With respect to claim 8, Yan et al disclose said plural devices include an image supply device (camera 102C, see Fig. 1) and an image printing device (printer 102B, see Fig. 1).

With respect to claim 9, Yan et al disclose said plural devices include a digital broadcast tuner (hdtv television 102E, Examiner notes that it is well-known that televisions contain built-in tuners or decoders), and wherein the processing program for execution of said image processing is downloaded to said tuner (the application need only download the necessary application or applet into the virtual machine instruction processor located on the peripheral device from a host computer, col. 10, lines 42-45).

With respect to claim 10, Yan et al disclose an image processing system according to claim 9, wherein said tuner is a set top box (hdtv television 102E, Examiner notes that it is well-known in the art that televisions contain built-in tuners or decoders.

These tuners could be built-in set-top boxes).

With respect to claim 11, Yan et al disclose an image processing system according to claim 8, wherein said image processing is converting image data supplied from said image supply device to print data in said image printing device (Examiner notes that it is obvious that the computer network system 100 can allow camera 102C to transfer an image via network interface to printer 102b or any other peripheral device in said system).

With respect to claim 12, Yan et al disclose an image processing system according to claim 11, wherein said image supply device is a digital camera (col. 18, lines 7-11).

With respect to claim 13, Yan et al disclose an image processing system according to claim 1, wherein said serial bus is adapted to or based on the IEEE 1394 standard (Yan et al teach that peripheral devices of the computer network 100 can interface (via interfaces 211 and 212) using a serial interface including e.g., IEEE1394 or "Firewire", col. 8, lines 16-25).

With respect to claim 14, Yan et al disclose an image processing system according to claim 1, wherein said serial bus is adapted to or based on the USB standard (Examiner notes that Yan et al teach that peripheral devices of the computer network 100 can interface (via interfaces 211 and 212) using a serial interface including other low latency communications technologies which would include USB, col. 8, lines 16-25).



3. Claims 15-17 are method claims and are rejected for the same reason as that of claim 1.

With respect to claim 18, Yan et al disclose a recording medium holding a control program (Yan et al teach of a storage device coupled to the host computer that is generally used to store an application which requires use of a peripheral device and is composed of one or more virtual machine instructions. The system also includes a determination mechanism typically embedded in the application which queries the peripheral database based upon a predetermined criteria and selects which peripheral device should execute the application, col. 5, lines 57-63) for controlling an image processing system having plural devices, including a device capable of executing predetermined image processing, interconnected via a serial bus, wherein said program comprising at least:

code for downloading a processing program for execution of said image processing from said device capable of executing predetermined image processing to a device which does not have a function of executing said image processing among said plural devices (Yan et al teach that to drive a peripheral device, the application need only download the necessary application or applet into the virtual machine instruction processor located on the peripheral device from a host computer, col. 10, lines 42-45);

and code for determining an executing device to execute said image processing from said plural devices based on said processing performance information (Yan et al teach a method that automatically selects a peripheral device for performing the requested job based upon the predetermined selection criteria, col. 19, lines 1-9).

Yan et al do not disclose code for obtaining processing performance information indicating performance of executing said image processing from each of said plural devices.

Vazquez et al teach of evaluating the performance of image processing algorithms wherein the execution times for any script/algorithm is determined for the hardware/software events as applied to an image (col. 9, lines 4-34, col. 13, lines 56-67, and see Figs. 12-14).

Yan et al and Vazquez et al are analogous art because they are from the similar problem solving area of image processing performance. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add the algorithm evaluation feature of Vazquez et al to the hardware system of Yan et al in order to obtain capability of determining the performance parameters of processing an image. The motivation for doing so would be to determine image processing speed.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

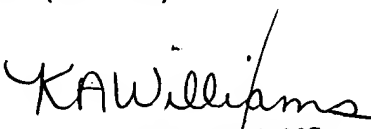
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Lett whose telephone number is (571) 272-7464. The examiner can normally be reached on 7-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (571) 272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJL



  
KIMBERLY WILLIAMS  
SUPERVISORY PATENT EXAMINER